Molecular Grafting to Silicon Surfaces in Air Using Organic Triazenes as Stable Diazonium Sources and HF as a Constant Hydride-Passivation Source—Supporting Information

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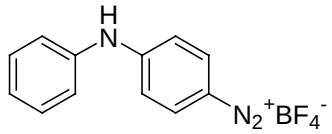

7

4-Phenylamino-benzenediazonium Tetrafluoroborate (7). To a 250 mL round bottom flask was added *N*-phenyl-*p*-phenylenediamine (1.00 g, 5.43 mmol). THF (30 mL) was added and cooled to -50°C. Borontrifluoride etherate (2.75 mL, 21.72 mmol) was added dropwise, followed by the dropwise addition of *tert*-butylnitrite (0.86 mL, 6.52 mmol) in THF (5 mL). The reaction was allowed to warm to -10 °C at which point Et_2O (150 mL) was added. The suspension was allowed to stir for 10 min. The precipitated solid was collected by vacuum filtration to afford a mixture of **7** and the *N*-nitroso adduct. The collected solid was dissolved in a minimum of CH_3CN (10 mL) and Et_2O (150 mL) was

added. The green solid was collected by vacuum filtration to afford the title compound as a light green solid (0.31 g, 20%). ^{1}H NMR (400 MHz, (CD_3CN) δ 8.80 (s, 1H), 8.06 (d, *J* = 10.6 Hz, 2H), 7.49 (t, *J* = 8.1 Hz, 2H), 7.34 (m, 3H), 7.10 (d, *J* = 10.6 Hz, 2H). ^{13}C NMR (100 MHz, CD_3CN) δ 156.5, 137.3, 135.3, 130.5, 127.8, 124.5, 116.2, 92.6.